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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/627,747	07/28/2003	Tamotsu Yamamoto	2003_0855A	4403

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WENDEROTH, LIND & PONACK, L.L.P.
2033 K STREET N. W.
SUITE 800
WASHINGTON, DC 20006-1021

EXAMINER	
AUGUSTINE, NICHOLAS	
ART UNIT	**PAPER NUMBER**
2179	
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04/30/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/627,747	YAMAMOTO ET AL.	
	Examiner	Art Unit	
	Nicholas Augustine	2179	

– The MAILING DATE of this communication appears on the cover sheet with the correspondence address –

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *30 January 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3-7 and 10-16* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) *1,3-7 and 10-16* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

A. This action is responsive o the following communications: Amendment filed 01/30/2007. **This action is made final.**

B. Claims 1,3-7 and 10-15 are amended; claims 1,3-7,10-16 are pending; claim 16 is new.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 1-13 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsuk et al (US 2003/0076301 A1) in view of Buckley et al (US 2003/0135649 A1).

As for independent claim 1, Tsuk teaches a portable electronic device (700) comprising: a first manipulator means (712A) supplying a signal for performing a first screen process on information displayed on a display (par.70, line 8); a second manipulator means (710) for supplying a circumferential movement signal for performing a second screen process on the information displayed on the display (924), said second manipulator means including a ring-shaped manipulator having an inner circumference side (710), and outer circumference side (712A), and a bottom surface (it is apparent there exist a bottom to the top surface depicted in element 710), said second manipulator means for supplying the circumferential movement signal according to said ring-shaped manipulator means (par.70, figure 7B); and a controller for interfacing with said first manipulator means, said second manipulator means, and the display, wherein: said first manipulator (712A-B) means is arranged at either the inner circumference side or the outer circumference side of the said ring shaped manipulator (712AorB) (par.73, lines 1-3); responsive to the signal supplied from said first manipulator means, said controller is operable to perform the first screen process by scrolling the information displayed on the display and selecting a display position (par.70, line 8); and responsive to the circumferential movement signal supplied from said second manipulator means (934), said controller is operable to perform the second screen process (934 and par.73, lines 1-3). the second screen process being one of a process of switching the screen with the selected display position as a reference (par.81, lines 3-4). Tsuk does not specifically mention the second screen process being one of scaling up the information,

scaling down the information. However in the same field of endeavor Buckley teaches the second screen process being one of scaling up, scaling down, and switching the screen with the selected display position as a reference (par.22, line 3 and 14-15 and figs.2-4). It would have been obvious at the time of the invention to combine the method of Buckley into the device and method of Tsuk. The motivation to combine is fast and easy views of data for reading at higher resolutions in another words zooming in (par.20, lines 5-8) Also it is true that is appreciated that the method of Buckley can easily be implemented into the device and methods of Tsuk for the purposes of the user being able to see data at higher resolutions for a better view to make up for the small screen real estate. Also note that Tsuk's invention is not limited to a media player and can be in the form of any standard common portable device such as a cell phone, PDA or the like as suggested by Tsuk (par.38, lines 15-17).

Please note the analysis of claim 1 for claims 3-15 below

As for dependent claim 3, Tsuk teaches the portable electronic device of claim 1, wherein said ring-shaped manipulator is operable to rotate circumferentially; and said second manipulator means (910, 934) includes a rotation detector for detecting a direction (par.77, line13) and an amount of rotation of said ring-shaped manipulator (par.79, line 15).

As for dependent claim 4, Tsuk teaches the portable electronic device of claim 3,

wherein said rotation detector is arranged so as to interface with the bottom surface of said ring-shaped manipulator (fig.8B, 854,852); and said rotation detector comprises: a rotation magnet magnetized according to alternating north and south intervals of an equal angle, and fixed on the bottom surface of said ring-shaped manipulator (856) (par.77) and a pair of magnetic sensors arranged so as to be opposed to said rotatable ring-shaped manipulator (par.79, lines 7-10 and fig.12) and arranged with a predetermined clearance between said pair of magnetic sensors and said ring magnet(fig.8B); and said rotation detector is operable to detect movement of said ring magnet in relation to said pair of magnetic sensors (par.91, line 3 and 7). **Note:** *That the sensors are optical or electronic instead of magnets that are magnetized for this purpose it is appreciated that all three solve the same problem of sensing and that is well known in the art that optical and electronic methods are a new generation of sensing, detecting signals that provide better results than of magnetic methods. For the purposes of the analysis of this claim those skilled in the art will appreciate that Tsuk is utilizing a newer method of sensing and if optical or electronic sensors and detectors had not been available at the time of Tsuk invention would have made the use of magnetism with magnetic sensors.*

As for dependent claim 5, Tsuk teaches the portable electronic device of claim 3, wherein said controller is operable to perform the second screen process according to the detected direction and the amount of rotation of said ring-shaped manipulator (par.91, lines 9-11 and par.92, lines 6-7). Tsuk does not specially mention that of

scaling up, scaling down on the screen. However in the same field of endeavor Buckley teaches the second screen process being one of scaling up, scaling down, and switching the screen with the selected display position as a reference (par.22, line 3 and 14-15 and figs.2-4). It would have been obvious at the time of the invention to combine the method of Buckley into the device and method of Tsuk. The motivation to combine is fast and easy views of data for reading at higher resolutions in another words zooming in (par.20, lines 5-8).

As for dependent claim 6, Tsuk teaches the portable electronic equipment of claim 1, further comprising a circular rubber manipulator having a front and a back (910 and par.77, "scroll wheel" as known in the art typically examples of scroll wheels are made of rubber) a first manipulator means for supplying a signal for performing a first screen process on information displayed on a display, said first manipulator means arranged to interface with the back of said circular rubber manipulator; a second manipulator means for supplying a circumferential movement signal for performing a second screen process on the information displayed on the display, said second manipulator means arranged to interface with the back of said circular rubber manipulator; and a controller (par. 78), wherein: said first manipulator means includes a press button and a self-restoring contact opposed to said press button; said second manipulator means comprises: a ring-shaped conductive depressing portion; and a plurality of concentrically disposed second contacts opposed to said ring-shaped conductive

depressing portion with a predetermined clearance between said plurality of concentrically disposed second contacts and said ring-shaped conductive depressing portion; said controller is operable to perform the first screen process by scrolling the information displayed on the display and operable to select a display position according to the signal supplied from said first manipulator means; and said controller is operable to perform the second screen process (par.79). Tsuk does not specifically mention the graphical user interface scaling by means of rotational input however in the same field of endeavor Buckley teaches the second screen process being one of a process of scaling up the information, scaling down the information, and switching a screen of information displayed on the display with the selected display position as a reference, according to the circumferential movement signal supplied from said second manipulator means. (note the analysis of claims 1,2,3,4,5 above) It would have been obvious at the time of the invention to combine the method of Buckley into the device and method of Tsuk. The motivation to combine is fast and easy views of data for reading at higher resolutions in another words zooming in (par.20, lines 5-8) Also it is true that is appreciated that the method of Buckley can easily be implemented into the device and methods of Tsuk for the purposes of the user being able to see data at higher resolutions for a better view to make up for the small screen real estate. Also note that Tsuk's invention is not limited to a media player and can be in the form of any standard common portable device such as a cell phone, PDA or the like as suggested by Tsuk (par.38, lines 15-17).

As for dependent claim 7, Tsuk teaches the portable electronic equipment of claim 6, wherein

said controller is operable to perform the first screen process according to an actuation of said self-restoring contact by said press button (par.77); said controller is operable to detect a direction of a circumferential sliding operation of said circular rubber manipulator (note claim 6), and operable to detect an amount of directional rotation of said circular rubber manipulator caused by the circumferential sliding operation (par.77 and 79); and said controller is operable to perform the second screen process according to the detected direction and the amount of directional rotation of said circular rubber manipulator (par.62, line 1-5; item 924 and par.69, line 6).

As for dependent claim 10, Tsuk teaches the portable electronic device of claim 6, wherein said first manipulator means is arranged at an outer circumference of said second manipulator means (712A), and wherein said first manipulator means includes a conductive depressing portion and a first contact opposed to said conductive depressing portion (par.70, lines 8-12 and par.77, line 15; wherein the first manipulator buttons are appreciated by one of ordinary skill the clicking of a button with the technology presented for the rotatable manipulator share equally the same method although not specifically mentioned.

As for dependent claim 11, Tsuk teaches the portable electronic device of claim 6, wherein; said first manipulator means is operable to detect operation within a same

plane (fig.8 B) in a direction different from that of said second manipulator means (par.70, line 10); i.e. angular versus linear.

As for dependent claim 12, Tsuk teaches the portable electronic device of claim 6, wherein said circular rubber manipulator (note claim 1,6) has an indication means for indicating a position of said first manipulator means (923 and par.70, line 8).

As for dependent claim 13, Tsuk teaches the portable electronic device of claim 1, wherein said first manipulator means is a multi-directional switch operated by one of depressing and tilting (fig.7, left, up, down, right directional and par.70, line 8).

As for dependent claim 15, Tsuk teaches the portable electronic device of claim 1 further comprising a built-in display device (904).
As for dependent claim 16, Tsuk teaches the portable electronic device of claim 6, further comprising an integrated display device (LCD; par.67).

4. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tsuk in view of Buckley as applied to claims 1-13 and 15 above, and further in view of Paloniemi (US 2001/0017934 A1).

As for dependent claim 14, Tsuk in view of Buckley teaches the portable electronic device of claim 1 (note the analysis of claim 1), Tsuk in view of Buckley does not

specifically mention trackball. However for the same problem sought to be solved Paloniemi teaches wherein said first manipulator means is a track ball (par.2). It would have been obvious to one or ordinary skill in the art at the time of the invention to combine the device and method of Paloniemi into the device and methods of Tsuk as modified by Buckley, this is true because electronic navigation is made easier though input devices such as buttons, wheels, and trackballs (par.2, line 1)

Response to Arguments

Applicant's arguments filed 01/30/2007 have been fully considered but they are not persuasive.

- *Applicant argues that Tsuk in view of Buckley does not teach amended claims 1 and 6: "scaling information..." (Pages 9-11 of amendment).*
- Examiner does not agree with the applicant. Examiner believes the applicant contradicts themselves in paragraph 3 on page 10 of amendment. Further clarification is not provided to express how the term scaling and zooming are directly related to art of graphical user interfaces in relation to the prior art provided.

  Applicant agrees that Tsuk provides a device for scrolling with a rotational input control. Tsuk will be omitted from this discussion and will focus on Buckley.

Buckley says the user can request different resolutions in effect *zooming in*, although the choice to use the word "zooming" over "scaling" can be at first misleading without proper understanding of the art. Scaling by definition means " ***scale - [n] the ratio between the size of something and a representation of it; "the scale of the map"; "the scale of the model"*** (definition taken from http://www.hyperdictionary.com). Now clearly shown by figures 3-4 of Buckley we have a zoomed out or *scaled down version* of document displayed on figure 3, then the user sends a request to have more resolution, **NOTE: the screen resolution of the display device can not change** (*so this example would be backwards from a computer desktop example*) so the size of the document is increased. For example, say the initial scaled down version of the document is 478X240, so it would fit the display device screen (which is also 478x240) then the user request for an increase in resolution (*for purposes to provide more detail to the document, to look at it closer*) so now the size of the document becomes 800X600 (it's so happen original size of the document), this overlaps with the size of the display device causing a zoom effect to take place (this is also called in the art "scaling"), wherein we have the size ratio 478x240 *scaled down representation of original version* to a 800x600 actual non-scaled full size document). (*paragraphs 18,20,22 and figures 3 and 4 of Buckley).*

Examiner feels the argument of Buckley not teaching the act of scaling was from a misunderstanding of the first Office Action and apologizes, in regards hopes that this better understanding expedites prosecution.

- *Applicant does not agree with the motivation to combine references Tsuk, Buckley, or Paloniemi (Page 11 of amendment).*
- Examiner disagrees with the applicant. The motivation to combine Paloniemi to Tsuk in view of Buckley was obvious as stated above; in such it would be an obvious variant to attach a trackball (something known in the art at the item of the invention, used for navigation on computer devices) to replace the rotational device of Tsuk. (paragraph 2 of Paloniemi). The motivation to combine Buckley into Tsuk is based on Buckley providing a method and system to effectively display information on small devices (like the one provided by Tsuk) that have limited screen real estate (paragraph 16). Buckley also mentions systems internally performing the functions of scrolling, zooming, and panning as well in paragraph 16, line 15). One of ordinary skill in the art would come by the advantages and ideas presented by Buckley for limited real-estate devices and could be motivated to add a resolution request module to a computing device of Tsuk (par.8-9 and par.20, line 3). Also note that it is appreciated that the method of Buckley can easily be implemented into the device and methods of Tsuk for the purposes of the user being able to see data at higher resolutions for a better view to make up for the small screen real estate in such that Tsuk's invention is not limited to a media player and can be in the form of any standard common portable device such as a cell phone, PDA or the like as suggested by Tsuk (par.38, lines 15-17), in this case a PDA as shown in figure 3 of Buckley.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Inquires

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nicholas Augustine whose telephone number is 571-270-1056. The examiner can normally be reached on Monday - Friday: 7:30- 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Weilun Lo can be reached on 571-272-4847. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Nicholas Augustine
Examiner
2179

N. Augustine
April 23, 2007

BA HUYNH
PRIMARY EXAMINER